Lab 6

Determination the Concentration of Borax ($Na_2B_4O_7.n\ H_2O$)

- **Principle :-**

  $HCl + Na_2B_4O_7 + H_2O \longrightarrow NaCl + H_3BO_3 + H_2O$

❖ Procedure :-

1. Fill up the burette with standard HCl (0.05N)
2. Take 10ml of unknown **Borax** solution and transfer it to clean conical flask
3. Add 2-3 drops of Methyl Orange (M.O) indicator
4. Titrant against standard HCl until end point at which color of Methyl Orange (M.O) change from Yellow color to red color
5. Report the titration three times and take the average .

$V_{Initial}$	V_{Final}	Consumed Volume

- **Calculation**

  $N_1 * V_1 = N_2 V_2$

  (Analyte) (titrant)

  ? * 10ml =0.05*V

  $N_1 = \frac{0.05 * v}{10}$ = ……

  Strengh = $N_1 * \frac{eq.wt}{2}$ =……..g/L